SPECIAL AIRWORTHINESS INFORMATION BULLETIN

Aircraft Certification Service
Washington, DC

U.S. Department of Transportation

Federal Aviation Administration

CE-05-56
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http://www.faa.gov/aircraft/safety/alerts/

This is information only. Recommendations are not mandatory.

Introduction

This Special Airworthiness Information Bulletin advises you, owners and operators of **Piper Aircraft Inc., The New and Tiger Aircraft LLC (American General) aircraft models** (see table 1) modified with TCB Composites, Inc. composite spinner bulkheads of a potential safety problem.

Table 1

Models	TC Number	STC Number
Piper Aircraft, Inc., The New		
PA-28-140, -150, -151,-160, -161, -180, -181	2A13	SA00178AT
PA-38-112	A18SO	SA00717AT
PA-23-250; PA-39	1A10	SA00733AT
PA-30	A1EA	SA00735AT
PA-34-200T	A7SO	SA00821AT
PA-28-180, -181	2A13	SA00945AT
PA-24-260; PA-28RT-201; PA-32-260, -300, -301; PA-32R-300; PA-36-300	A3SO	SA00954AT
PA-28-235; PA-28R-180, -200	2A13	SA00955AT
Tiger Aircraft LLC (American General)		
AA-5B, AG-5B	A16EA	SA01284AT
AA-5	A16EA	SA01852AT

Background

We have received information that galvanic corrosion may develop between the composite spinner bulkhead and the propeller hub. This corrosion may lead to propeller hub stress fractures and/or loss of torque preload of the propeller hub bolts.

Further, the composite material of the spinner bulkhead underneath the propeller hub bolts may experience visco-elastic creep or crush, which could result in loss of torque preload on the propeller hub bolts.

Recommendation

We recommend that you do the following:

- Check preload torque setting of propeller hub bolts to be within manufacturer specifications.
- Remove and inspect composite bulkheads for evidence of corrosion on mating metallic surfaces.
- Inspect composite bulkhead underneath the propeller hub bolts for indentation or cracks and inspect propeller hub bolt washers for evidence of deformation.
- If you find any abnormal conditions, contact TCB Composites to determine corrective action.

You can contact TCB Composites at

3811 S. Airport Road, Building 850, Ogden, UT 84405, phone (801) 392-3400.

For Further Information Contact

Kreg Voorhies, Aerospace Engineer, FAA Denver Aircraft Certification Office (ANM-100D), 26805 E. 68th Avenue, Room 214, Denver, CO 80249; phone: (303) 342-1092; fax (303) 342-1088; email: kreg.voorhies@faa.gov.